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EXAMINER RIVIERE, HEIDI M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,979

Applicant(s)

SAHO ET AL.

Examiner

HEIDI RIVIERE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on **10 September 2010**, with respect to the rejection(s) of claim(s) 1-14 under **Tanaka (JP 2002215731 A)** in view of **Kluss (US 6/463,419 B1)** have been carefully considered and they are not persuasive however the action is non-final in light of the updated rejection below.

2. Applicant has amended claims 1, 4 and 5 to include "in at least one ballast tank, separate from a cargo carrying tank of the vessel". Applicant argues that the Kluss reference doesn't suggest "using a ballast tank of a ship to transport recycled water, separate from the transport of some other cargo, such as oil". Kluss teaches a segregated ballast tank is used. (Kluss: col. 21). According to United States Code, 2005 CFR Title 33 – Navigation and Navigable Waters, Chapter 1, subchapter O, part 157, subpart a, section 157.03 – definitions "Segregated ballast means the ballast water introduced into a tank that is completely separated from the cargo oil and fuel oil system and that is permanently allocated to the carriage of ballast." Inherently a segregated ballast tank refers to a tank of water separate from oil cargo.

3. Applicant argues that the Tanaka reference does not deal with a ship and is therefore not obvious. It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast information in Kluss because of the convenience of

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using a ship to distribute the water and having a new source to recycle for distribution. Tanaka teaches the matching of supply and demand for recycled water with a usage server that performs water supply based on a contract. Kluss teaches a vessel transport system that inventories ballast water contained in the vessel and documents the cost of such water. The Kluss system also matches buyers and sellers for vessel related activities and the details involved in transacting for control of the ship. The claims presented below teach the sale of water but makes no reference to how the water is recycled and whether such recycling entails reuse or any treatment at all. Because the claims merely reference the vessel carrying the water the type of water not given inventive weight.

4. Furthermore, Derwent is merely a supplemental database which can be used to obtain the previously attached reference. Please refer to the noted Japanese citation referenced in the write-up.

5. The replacement drawing sheet Filed is not accepted. According to 37 CFR 1.121, "[a]ny changes to an application drawing must be in compliance with § 1.84 and must be submitted on a replacement sheet of drawings which shall be an attachment to the amendment document and, in the top margin, labeled "Replacement Sheet"... All changes to the drawings shall be explained, in detail, in either the drawing amendment or remarks section of the amendment paper." Applicant has neither placed the label "replacement sheet" in the correct location or explained the reason for the replacement sheet. Since there are no changes the replacement sheets are not accepted.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-6, 9, 10 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (JP 2002215731 A) (Derwent 2003-460472) in view of Kluss (US 6/463,419 B1).**

8. **With respect to Claim 1: (currently amended)** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution):

The Tanaka reference does not teach the details of how to market and sell this supply of treated water, however the Kluss reference teaches:

- storing means for storing demand information concerning a demand, supply information concerning a supply, and matching information which indicates a result of matching of said demand information and said supply information; (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system)

- matching means for making a match of each piece of said demand information with said supply information to find a matched piece of supply information that satisfies a demand of said demander and outputting a matching result as matching information; (Kluss: col. 9, lines 1-67; col. 11, lines 1-67 – the system matches ship information with potential charterer information) (Drew: Fig. 25, paragraph 66 – central station generates reports for matching project survey data)
- register means for registering said demand information, said supply information and said matching information output by said matching means to said storing means; (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data)
- display creation means for creating a matching information list screen on which a list of said matching information is displayed; (Kluss: col. 12, lines 45-67 – list of matching ships presented to user) and
- communication means for receiving said demand information and said supply information through a communication line and sending said matching information list screen through said communication line; and (Kluss: col. 20, lines 35-67 – email used to transmit information)
- correction means for correcting said demand information and said supply information on the basis of a maximum transport water quantity of said

domestic treated water said vessel can transport in said at least one ballast tank. (Kluss: Fig. 20, items 47, 2026 and 2028; Figs. 27-29 – offers can be modified; col. 17, line 45-col. 18, line 40 – form can be modified; col. 21 – charterer requirement information includes ballast water quantity)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo contract information in Kluss because “it would be advantageous to provide a forum wherein shipping information is directly available”. (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

9. **With respect to Claim 2:** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution):

The Tanaka reference does not teach the details of how to market and sell this supply of treated water, however the Kluss reference teaches:

- information includes information on water qualities, a demand quantity, a demand date and a purchase price of said item demanded, and wherein

said supply information includes information on water qualities, a supply quantity, a supply date and a supply price of said domestic treated water to be supplied. (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 21 – charterer requirement information includes ballast water quantity)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo contract information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available". (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

10. With respect to Claim 3: (currently amended) Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution):

The Tanaka reference does not teach the details of how to market and sell this supply of treated water, however the Kluss reference teaches:

- through said communication means, there are received selection information that indicates which piece of said matching reformation is selected in said matching information list screen and transport offer information which includes information on said transport water quantity and a sale price obtained by adding a desired fee to said supply price; (Kluss: col. 20, lines 35-67 – email used to transmit information) and
- said display creation means creates and sends a transport offer screen on which a list of said transport offer information is displayed through said communication means, and wherein when offer selection information that indicates which piece of said transport offer information is selected in said transport offer screen is received, on the basis of said offer selection information, said correction means registers, in a supply information database, a result of subtracting said transport water quantity from a purchase quantity in a piece of said demand information for which a transaction has been determined and registers, in said supply information database, a result of subtracting said transport water quantity from a supply water quantity in a piece of said supply information that is matched with said piece of said demand information for which said transaction has been determined. (Kluss: Figs. 2 and 15 – processor system with input/output devices and memory; computer; col. 21 – charterer requirement information includes ballast water quantity)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship

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ballast and cargo contract information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available". (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

11. **With respect to Claim 4: (Currently Amended)** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution):

The Tanaka reference does not teach the details of how to market and sell this supply of treated water, however the Kluss reference teaches:

- receiving supply information which includes information on water qualities, a supply quantity and a supply date of said item which each supplier supplies through a communication line from a supplier's terminal used by the supplier and registering said supply information in a supply information database; (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col.

17, lines 35-50, col. 21— system keeps record/log of ship information; form for entering data)

- receiving demand information which includes information on water qualities, a demand quantity and a demand date of said item each demander demands through said communication line from a demander's terminal used by the demander, and registering said demand information to a demand information database; (Kluss: col. 6, lines 30-67 — ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 — matching data stored in the system)
- making a match of each piece of said demand information with said supply information to find a matched piece of supply information that satisfies a condition of each parameter in said each piece of said demand information (Kluss: col. 9, lines 1-67; col. 11, lines 1-67 — the system matches ship information with potential charterer information) and
- registering a matching result as matching information to a matching information database; (Kluss: col. 6, lines 30-67 — ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 — matching data stored in the system) and
- creating a matching information list screen on which a list of said matching information is displayed and sending said matching information list screen through said communication line to a ship owner's terminal used by a ship owner of each vessel. (Kluss: col. 12, lines 45-67 — list of matching ships presented to user)

- correction means for correcting said demand information and said supply information on the basis of a maximum transport water quantity of said domestic treated water said vessel can transport in said at least one ballast tank. (Kluss: Fig. 20, items 47, 2026 and 2028; Figs. 27-29 – offers can be modified; col. 17, line 45-col. 18, line 40 – form can be modified; col. 21 – charterer requirement information includes ballast water quantity)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo contract information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available". (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

12. With respect to Claim 5: (Currently Amended) Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution):

The Tanaka reference does not teach the details of how to market and sell this supply of treated water, however the Kluss reference teaches:

- the transaction supporting system receiving supply information which includes information on water qualities, a supply quantity and a supply date of said domestic treated water which each supplier supplies through a communication line from a supplier's terminal used by the supplier and registering said supply information in a supply information database; receiving demand information which includes information on water qualities, a demand quantity and a demand date of said item each demander demands, through said communication line from a demander's terminal used by the demander, and registering said demand information to a demand information database; (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data)
- making a match of each piece of said demand information with said supply information to find a matched piece of supply information that satisfies a condition of each parameter in said each piece of said demand information (Kluss: col. 9, lines 1-67; col. 11, lines 1-67 – the system matches ship information with potential charterer information) and
- registering a matching result as matching information in a matching information database; (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col.

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17, lines 35-50, col. 21— system keeps record/log of ship information; form for entering data)

- creating a matching information presenting screen on which said matching information is compiled for each demander and sending said matching information to said demander's terminal; receiving selection information that indicates which piece of said matching information is selected in said matching information presenting screen from said demander's terminal, and creating and sending a matching information list screen on which a list of selected matching information is displayed based on said selection information to a ship owner's terminal used by a ship owner of each vessel; and (Kluss: col. 12, lines 45-67 – list of matching ships presented to user)
- correction means for correcting said demand information and said supply information on the basis of a maximum transport water quantity of said domestic treated water said vessel can transport in said at least one ballast tank. (Kluss: Fig. 20, items 47, 2026 and 2028; Figs. 27-29 – offers can be modified; col. 17, line 45-col. 18, line 40 – form can be modified; col. 21 – charterer requirement information includes ballast water quantity)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo contract information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available". (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals

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with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

13. **With respect to Claim 6:** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution). Tanaka does not teach, however Kluss teaches a degree of similarity is calculated in matching each parameter of said demand information and said supply information in said step of making a match; and in creating said matching information presenting screen, pieces of said matching information are displayed in a descending order of said degree of similarity. (Kluss: col. 12, lines 45-67 – list of matching ships presented to user)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the matching information in Kluss because of the convenience of linking buyers and suppliers. Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

14. **With respect to Claim 9: (Currently Amended)** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution):

Tanaka does not teach the following, however Kluss teaches:

- receiving, through said communication line from said ship owner's terminal, selection information that indicates which piece of said matching information is selected in said matching information list screen and transport offer information which includes information on the maximum transport water quantity of said domestic treated water the vessel can transport in said at least one ballast tank and a sale price obtained by adding a desired fee to said supply price; (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data)
- creating and sending a transport offer screen on which a list of said transport offer information is compiled for each demander to a relevant demander's terminal; (Kluss: col. 12, lines 45-67 – list of matching ships presented to user) and

- receiving, from said demander's terminals, offer selection information that indicates which piece of said transport offer information is selected in said transport offer screen, on the basis of said offer selection information, registering, in said supply information database, a result of subtracting said transport water quantity from a purchase water quantity in a piece of said demand information for which a transaction has been determined, registering, in said supply information database, a result of subtracting said transport water quantity from a supply water quantity in a piece of said supply information that is matched with said piece of said demand information for which a transaction has been determined, and returning to said step of making a match. (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo contract information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available". (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a

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potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

15. **With respect to Claim 10:** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution)

Tanaka does not teach the following, however Kluss teaches a program is recorded to make a computer execute the domestic treated water transaction supporting method. (Kluss: Figs. 2 and 15 – processor system with input/output devices and memory; computer)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Tanaka and Kluss because use of a computer program would make it easier to keep records and logs. Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

16. **With respect to Claim 15: (New)** The domestic treated water transaction supporting system according to claim 1, wherein said cargo carrying tank is configured to carry oil. (Kluss: col. 21 – vessel has segregated ballast tanks where at least one might require an oil wash)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available" openly to all parties. (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

Please note definition of segregated ballast tanks above.

17. **With respect to Claim 16: (New)** The domestic treated water transaction supporting system according to claim 1, wherein said cargo carrying tank is configured to carry oil. (Kluss: col. 21 – vessel has segregated ballast tanks where at least one might require an oil wash)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available" openly to all parties. (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

Please note definition of segregated ballast tanks above.

18. **With respect to Claim 17: (New)** The domestic treated water transaction supporting system according to claim 1, wherein said cargo carrying tank is configured to carry oil. (Kluss: col. 21 – vessel has segregated ballast tanks where at least one might require an oil wash)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo information in Kluss because “it would be advantageous to provide a forum wherein shipping information is directly available” openly to all parties. (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

Please note definition of segregated ballast tanks above.

19. **Claims 7-8 and 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka** in view of **Kluss** and further in view of **Kasparian et al. (US 2005/0040107 A1)** (hereinafter “**Kasparian**”).

20. **With respect to Claim 7:** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it

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requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution):

Tanaka in view of Kluss do not teach the following, however Kasparian teaches a piece of said information on said water qualities in said supply information and said demand information includes information on a chemical oxygen demand, a total nitrogen and a total phosphorus. (Kasparian: paragraphs 111-117 and 132-159 – COD, ammonia-N and phosphorus testing of wastewater and presentation of results)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Tanaka, Kluss and Kasparian because knowing the chemical content of the water is essential to proper recycling. Kasparian teaches a wastewater treatment system. Like the current application Tanaka deals with waste water and the marketing and sale of this water. One of ordinary skill would find that the water to be marketed has to be treated and tested to ensure that the treatment was within compliance limits and therefore testing for the various chemicals would be required. While Kluss deals with the contract negotiations between the ship owner and potential customers. Tanaka teaches that the ballast water can be sold while Kasparian teaches that the water should be tested.

21. **With respect to Claim 8:** Tanaka teaches the marketing and sale of water based on a supply and demand market. (Summary: An agent of each of supply and demand sites requests a market management server and a sub-market server to supply a necessary amount of treated water. At that moment, it

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requests the treated water at a cost incorporating a cost required for water distribution according to a network of water distribution)

Tanaka does not teach, however Kluss teaches said supply information includes information on a supply price of said domestic treated water; said demand information includes information on a purchase price of said domestic treated water; and in said step of making a match, making matching candidates of pieces of said demand information and said supply information for which pieces a difference between said purchase price and said supply price is equal to or more than a predetermined value. (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the matching information in Kluss because of the convenience of linking buyers and suppliers. Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

22. **With respect to Claim 11:** Tanaka in view of Kluss teach the limitations cited in the rejections above. Tanaka in view of Kluss do not teach, however Kasparian teaches a piece of said information on said water qualities in said

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supply information and said demand information includes information on a chemical oxygen demand, a total nitrogen and a total phosphorus. (Kasparian: paragraphs 111-117 and 132-159 – COD, ammonia-N and phosphorus testing of wastewater and presentation of results)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Tanaka, Kluss and Kasparian because knowing the chemical content of the water is essential to proper recycling. Tanaka and Kluss are based on the use of water. Kasparian teaches a wastewater treatment system. Like the current application Tanaka deals with waste water and the marketing and sale of this water. One of ordinary skill would find that the water to be marketed has to be treated and tested to ensure that the treatment was within compliance limits and therefore testing for the various chemicals would be required. While Kluss deals with the contract negotiations between the ship owner and potential customers. Tanaka teaches that the ballast water can be sold while Kasparian teaches that the water should be tested.

23. **With respect to Claim 12:** Tanaka teaches the limitations cited in the rejections above. Tanaka does not teach, however Kluss teaches said supply information includes information on a supply price of said domestic treated water; said demand information includes information on a purchase price of said domestic treated water; and in said step of making a match, making matching candidates of pieces of said demand information and said supply information for which pieces a difference between said purchase price and said supply price is equal to or more than a predetermined value. (Kluss: col. 9, lines 1-67; col. 11,

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lines 1-67 – the system matches ship information with potential charterer information)

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo contract information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available". (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

24. **With respect to Claim 13:** Tanaka teaches the limitations cited in the rejections above. Tanaka does not teach, however Kluss teaches:

- receiving, through said communication line from said ship owner's terminal, selection information that indicates which piece of said matching information is selected in said matching information list screen and transport offer information which includes information on a transport water quantity of said item the vessel can transport and a sale price obtained by adding a desired fee to said supply price; (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data)

- creating and sending a transport offer screen on which a list of said transport offer information is compiled for each demander to a relevant demander's terminal; (Kluss: col. 12, lines 45-67 – list of matching ships presented to user) and
- receiving, from said demander's terminals, offer selection information that indicates which piece of said transport offer information is selected in said transport offer screen, on the basis of said offer selection information, registering, in said supply information database, a result of subtracting said transport water quantity from a purchase quantity in a piece of said demand information for which a transaction has been determined, (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data)
- registering, in said supply information database, a result of subtracting said transport quantity from a supply water quantity in a piece of said supply information that is matched with said piece of said demand information for which a transaction has been determined, returning to said step of making a match. (Kluss: col. 6, lines 30-67 – ship's database contains contract information cargo types and quantities; col. 9, lines 1-55 – matching data stored in the system; col. 11, line 55-col. 12, line 25, col. 17, lines 35-50, col. 21– system keeps record/log of ship information; form for entering data) and

It would have been obvious to one of ordinary skill in the art to modify the market for the demand and supply of recycled water of Tanaka with the ship ballast and cargo contract information in Kluss because "it would be advantageous to provide a forum wherein shipping information is directly available". (Kluss: col. 1, lines 40-46) Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

25. With respect to Claim 14: Tanaka teaches the limitations cited in the rejections above. Tanaka does not teach, however Kluss teaches recording media on which a program is recorded to make a computer execute the domestic treated water transaction supporting method. (Kluss: Figs. 2 and 15 – processor system with input/output devices and memory; computer)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Tanaka and Kluss because use of a computer program would make it easier to keep records and logs. Like the current application Tanaka deals with waste water and the marketing and sale of this water as well as the details necessary to create such an agreement between the vessel owner and a potential buyer. While Kluss deals with the contract negotiations between the ship owner and potential customers.

CONCLUSION

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heidi Riviere whose telephone number is 571-270-1831. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Heidi Riviere/
Examiner, Art Unit 3689